

CLAIMS

What is claimed is:

1 *Suy* 1. A home server comprising:
2 a personalization engine to create personal preference information from a user
3 regarding a content, the personal preference information being represented in a
4 description compatible with a content analyzer in an edge server; and
5 a content scheduler coupled to the personalization engine to schedule delivery
6 of the content from the edge server and uploading of the personal preference
7 information to the edge server.

1 — 2. The home server of claim 1 further comprising:
2 a local storage to cache the content delivered from the edge server; and
3 a content manager coupled to the local storage to manage the cached content.

1 — 3. The home server of claim 1 wherein the description is compatible with a
2 metadata associated with the content.

1 4. The home server of claim 3 wherein the metadata is one of a closed
2 caption, a Resource Description Framework (RDF), motion picture expert group
3 (MPEG)-7, TV-Anytime metadata, a Society of Motion Picture and Television
4 Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European
5 Broadcasting Union (EBU) P/meta.

1 — 5. The home server of claim 1 wherein the personalization engine
2 comprises:
3 a deduction engine to deduce the personal preference information based on
4 user's usage.

1 — 6. The home server of claim 1 wherein the personalization engine
2 comprises:
3 an input interface to obtain the personal preference information provided by the
4 user.

1 7. The home server of claim 2 wherein the content manager comprises:
2 a retriever to retrieve the cache content;
3 an indexer to index the cache content; and
4 a distributor to distribute the retrieved cache content to a device.

1 8. The home server of claim 7 wherein the content manager further
2 comprises:
3 a decryptor to decrypt the cache content; and
4 an archiver to archive the cached content.

1 9. The home server of claim 7 wherein the device is one of a viewing
2 device, a personal digital assistant (PDA), an audio visual device, a tablet, a personal
3 computer, a set-top box, a digital television set, and a wireless device.

1 10. An edge server comprising:
2 a content analyzer to analyze a content received from a media source based on a
3 description compatible with personal preference information from a user regarding the
4 content, the personal preference information being provided by a home server; and
5 a content filter coupled to the content analyzer to filter the content according to
6 the personal preference information for delivery to the user.

1 11. The edge server of claim 10 further comprising:
2 a content assembler to assemble the filtered content using the description into a
3 packaged content according to an assembly criterion; and
4 a content distributor coupled to the content assembler to distribute the packaged
5 content to the user based on delivery information provided by the home server.

1 12. The edge server of claim 10 wherein the media source is one of a Web
2 content, a television broadcast, a media broadcast, a video program, an audio program,
3 and an audio visual program.

1 13. The edge server of claim 10 wherein the description is compatible with a
2 metadata associated with the content.

1 14. The edge server of claim 13 wherein the metadata is one of a closed
2 caption, a Resource Description Framework (RDF), motion picture expert group
3 (MPEG)-7, a TV-Anytime metadata, a Society of Motion Picture and Television
4 Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European
5 Broadcasting Union (EBU) P/meta.

1 15. The edge server of claim 10 wherein the assembly criterion is one of a
2 semantic topic and a subscription level.

1 16. The edge server of claim 10 wherein the delivery information includes at
2 least a scheduled time, a quality of service information, and a transmission bandwidth.

1 17. The edge server of claim 13 wherein the content analyzer comprises:
2 a parser to parse the metadata.

1 18. The edge server of claim 10 wherein the content analyzer comprises:
2 a metadata creator to create a metadata associated with the content.

1 19. The edge server of claim 10 wherein the content filter comprises:
2 a matcher to match the description with the personal preference information.

1 20. A method comprising:
2 creating personal preference information from a user regarding a content, the
3 personal preference information being represented in a description compatible with a
4 content analyzer in an edge server; and
5 scheduling delivery of the content from the edge server and uploading of the
6 personal preference information to the edge server.

1 21. The method of claim 20 further comprising:
2 caching the content delivered from the edge server; and
3 managing the cached content.

1 22. The method of claim 20 wherein the description is compatible with a
2 metadata associated with the content.

1 23. The method of claim 22 wherein the metadata is one of a closed caption,
2 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,
3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)
4 metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union
5 (EBU) P/meta.

1 24. The method of claim 20 wherein creating personal preference
2 information comprises:
3 deducing the personal preference information based on user's usage.

1 25. The method of claim 20 wherein creating personal preference
2 information comprises:

3 obtaining the personal preference information provided by the user.

1 — 26. The method of claim 21 wherein scheduling delivery comprises:
2 retrieving the cache content;
3 indexing the cache content; and
4 distributing the retrieved cache content to a device.

1 — 27. The method of claim 26 wherein scheduling delivery further comprises:
2 decrypting the cache content; and
3 archiving the cached content.

1 — 28. The method of claim 26 wherein the device is one of a viewing device, a
2 personal digital assistant (PDA), an audio visual device, a tablet, a personal computer, a
3 set-top box, a digital television set, and a wireless device.

1 — 29. A method comprising:
2 analyzing a content received from a media source based on a description
3 compatible with personal preference information from a user regarding the content, the
4 personal preference information being provided by a home server; and
5 filtering the content according to the personal preference information for
6 delivery to the user.

1 — 30. The method of claim 29 further comprising:
2 assembling the filtered content using the description into a packaged content
3 according to an assembly criterion; and
4 distributing the packaged content to the user based on delivery information
5 provided by the home server.

1 — 31. The method of claim 29 wherein the media source is one of a Web
2 content, a television broadcast, a media broadcast, a video program, an audio program,
3 and an audio visual program.

1 — 32. The method of claim 29 wherein the description is compatible with a
2 metadata associated with the content.

1 — 33. The method of claim 32 wherein the metadata is one of a closed caption,
2 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a
3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)
4 metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union
5 (EBU) P/meta.

1 — 34. The method of claim 29 wherein the assembly criterion is one of a
2 semantic topic and a subscription level.

1 — 35. The method of claim 29 wherein the delivery information includes at
2 least a scheduled time, a quality of service information, and a transmission bandwidth.

1 — 36. The method of claim 32 wherein analyzing comprises:
2 parsing the metadata.

1 — 37. The method of claim 29 wherein analyzing comprises:
2 creating a metadata associated with the content.

1 — 38. The method of claim 29 wherein filtering comprises:
2 matching the description with the personal preference information.

1 39. A system comprising:
2 a media source to provide a media content;
3 an edge server connected to a network; and
4 a home server coupled to the edge server via the network, the home sever
5 comprising:
6 a personalization engine to create personal preference information from
7 a user regarding a content, the personal preference information being
8 represented in a description compatible with a content analyzer in the
9 edge server; and
10 a content scheduler coupled to the personalization engine to schedule
11 delivery of the content from the edge server and uploading of the
12 personal preference information to the edge server.

1 40. The system of claim 39 further comprising:
2 a local storage to cache the content delivered from the edge server; and
3 a content manager coupled to the local storage to manage the cached content.

1 41. The system of claim 39 wherein the description is compatible with a
2 metadata associated with the content.

1 42. The system of claim 41 wherein the metadata is one of a closed caption,
2 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,
3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)
4 metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union
5 (EBU) P/meta.

1 43. The system of claim 39 wherein the personalization engine comprises:
2 a deduction engine to deduce the personal preference information based on
3 user's usage.

1 44. The system of claim 39 wherein the personalization engine comprises:
2 an input interface to obtain the personal preference information provided by the
3 user.

1 —45. The system of claim 40 wherein the content manager comprises:
2 a retriever to retrieve the cache content;
3 an indexer to index the cache content;
4 a distributor to distribute the retrieved cache content to a device.

1 —46. The system of claim 45 wherein the content manager further comprises:
2 a decryptor to decrypt the cache content; and
3 an archiver to archive the cached content.

1 —47. The system of claim 45 wherein the device is one of a viewing device, a
2 personal digital assistant (PDA), an audio visual device, a tablet, a personal computer, a
3 set-top box, a digital television set, and a wireless device.

1 —48. A system comprising:
2 a media source to provide a media content;
3 a home server connected to a network; and
4 an edge server coupled to the home server via the network, the edge server
5 comprising:
6 a content analyzer to analyze a content received from a media source
7 based a description compatible with personal preference information
8 from a user regarding the content, the personal preference information
9 being provided by a home server; and
10 a content filter coupled to the content analyzer to filter the content
11 according to the personal preference information for delivery to the user.

1 —49. The system of claim 48 further comprising:
2 a content assembler to assemble the filtered content using the description into a
3 packaged content according to an assembly criterion; and
4 a content distributor coupled to the content assembler to distribute the packaged
5 content to the user based on delivery information provided by the home server.

1 —50. The system of claim 48 wherein the media source is one of a Web
2 content, a television broadcast, a media broadcast, a video program, an audio program,
3 and an audio visual program.

1 ~~51.~~ The system of claim 48 wherein the description is compatible with a
2 metadata associated with the content.

1 ~~52.~~ The system of claim 51 wherein the metadata is one of a closed caption,
2 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a
3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)
4 metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union
5 (EBU) P/meta.

1 ~~53.~~ The system of claim 48 wherein the assembly criterion is one of a
2 semantic topic and a subscription level.

1 ~~54.~~ The system of claim 48 wherein the delivery information includes at
2 least a scheduled time, a quality of service information, and a transmission bandwidth.

1 ~~55.~~ The system of claim 51 wherein the content analyzer comprises:
2 a parser to parse the metadata.

1 ~~56.~~ The system of claim 48 wherein the content analyzer comprises:
2 a metadata creator to create a metadata associated with the content.

1 57. The system of claim 48 wherein the content filter comprises:
2 a matcher to match the description with the personal preference information.